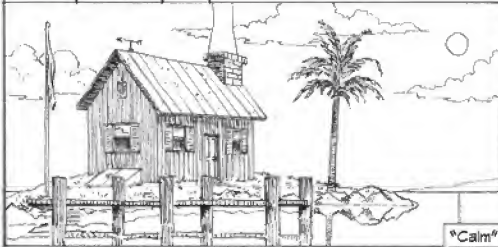


# The Beaufort Scale

"Over thousands of years sailors have learnt to estimate the speed of the wind just by looking about. This technique matured into what we now call the Beaufort scale. The universe tells you everything you need to know about it as long as you are prepared to watch, to listen, to smell, in short to observe"

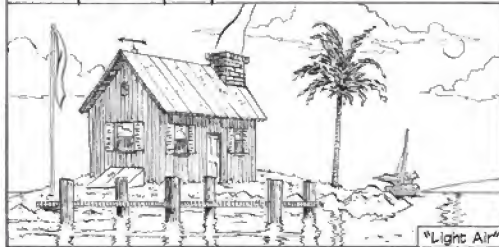
.....Howtoons 2006

FORCE	SPEED	SEA	LAND
0	0 Knots 0 mph 0 km/h	Sea like a mirror	Smoke rises vertically



"Calm"

FORCE	SPEED	SEA	LAND
1	1-3 Knots 1-3 mph 1-6 km/h	Ripples with the appearance of scales are formed, but without foam crests	Direction of wind shown by smoke but not by wind vanes



"Light Air"

FORCE	SPEED	SEA	LAND
2	4-6 Knots 4-7 mph 7-11 km/h	Small wavelets. Crests have a glassy appearance and do not break	Wind felt on face; leaves rustle; ordinary vane moved by wind



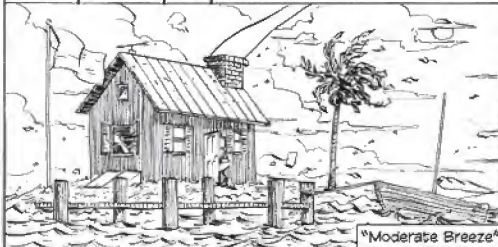
"Light Breeze"

FORCE	SPEED	SEA	LAND
3	7-10 Knots 8-12 mph 12-19 km/h	Large wavelets. Crests begin to break. Foam of glassy appearance.	Leaves and small twigs in constant motion; wind extends light flag



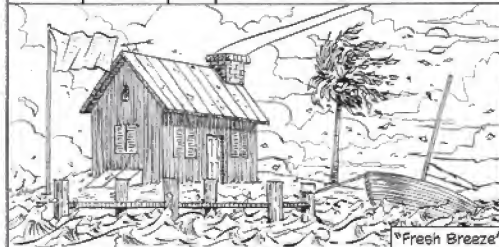
"Gentle Breeze"

FORCE	SPEED	SEA	LAND
4	11-16 Knots 13-18 mph 19-28 km/h	Small waves, becoming longer, fairly frequent white horses	Raises dust and loose paper; small branches are moved



"Moderate Breeze"

FORCE	SPEED	SEA	LAND
5	17-21 Knots 19-24 mph 30-39 km/h	Moderate waves, taking a more pronounced long form; many white horses are formed.	Small trees in leaf begin to sway; wavelets form on inland waters



"Fresh Breeze"

FORCE	SPEED	SEA	LAND
6	22-27 Knots 25-31 mph 40-50 km/h	Large waves begin to form; the white foam crests are more extensive everywhere.	Large branches in motion; whistling heard in telegraph wires; umbrellas use difficult.



"Strong Breeze"

FORCE	SPEED	SEA	LAND
7	28-33 Knots 32-38 mph 51-62 km/h	Sea heaps up and white foam from breaking waves starts to blow in streaks with wind.	Whole trees in motion; umbrellas discarded; inconvenience felt when walking



"Near Gale"

FORCE	SPEED	SEA	LAND
8	34-40 Knots 39-46 mph 63-75 km/h	Moderate high waves of greater length; edges of crests begin to break into spindrift.	Breaks twigs off trees; generally impedes progress



"Gale"

FORCE	SPEED	SEA	LAND
9	41-47 Knots 47-54 mph 76-87 km/h	High waves. Crests of waves begin to tumble and roll over. Spray may affect visibility	Slight structural damage occurs; chimney pots and slates removed



"Strong Gale"

FORCE	SPEED	SEA	LAND
10	48-55 Knots 55-63 mph 88-102 km/h	Very high waves. Surface of the sea takes on a white appearance. Visibility affected	Seldom experienced inland; trees uprooted; considerable structural damage occurs



"Storm"

FORCE	SPEED	SEA	LAND
11	56-63 Knots 64-72 mph 103-117 km/h	Exceptionally high waves. The sea is covered with long white patches of foam.	Very rarely experienced on land; accompanied by widespread damage.



"Violent storm"

FORCE	SPEED	SEA	LAND
12	over 63 Knots over 72 mph over 117 km/h	Huge waves; air is filled with foam and spray. Sea white with driving spray; visibility very seriously affected	Countryside is devastated



"Hurricane"